REMARKS

Claims 1-39 are pending. Claims 1, 3, 6, 10, and 27 are being amended.

The Examiner first objected to certain informalities in the specification. Appropriate corrections have been made to the specification to address the Examiner's concerns. Support for the corrections can be found in general in the specification and in particular on pages 12-15 and 18 and in claim 27. No new matter has been introduced. The Examiner is thanked for thoroughly reviewing the specification and providing comments thereon.

The Examiner objected to claim 27 as lacking support in the specification. Applicants respectfully traverse the Examiner's contention that claim 27 is not supported by the specification as filed. See pages 12-15 and 18 and claim 27 as originally filed. The claims form part of the specification. Nevertheless, Applicants have amended the specification to more clearly describe the limitations recited in claim 27 in the accompanying description. No new matter has been introduced.

The Examiner rejected claims 1-2, 4-5 and 7-8 under 35 U.S.C. § 101 for claiming non-statutory subject matter. Applicants respectfully traverse the Examiner's contention that claims 1-2, 4-5 and 7-8 fail to claim statutory subject matter. Claim 1 has been amended to clarify that manipulation of digital audio samples is claimed. No change in claim scope is intended. Claim 1 as amended recites "multiplying a sequence of digital audio input samples with a first trigonometric function factor to generate an intermediate sample sequence." The digital audio samples are physical quantities, not abstract numbers. Thus, multiplying, subtracting and adding the physical quantities creates difference physical quantities in the same way that multiplying, subtracting and adding analog signals creates new analog signals. Claims 2, 4-5 and 7-8 depend from claim 1. Thus, Applicants respectfully submit that claims 1-2, 4-5 and 7-8 claim statutory subject matter.

The Examiner rejected claims 1-9 and 17-23 under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,479,562 issued to Fielder, et al. The Examiner did not identify a second reference. The Examiner appears to base the rejection solely on his contention that the output of Fielder is the same as the claimed output. The Examiner concedes that Fielder does not disclose the claimed intermediate steps, but instead contends it would have been obvious to derive the

claimed intermediate steps. The Examiner points to no portion of Fielder suggesting that the claimed intermediate steps should be derived. Nor does the Examiner establish that the steps are inherent. Thus, Applicants respectfully traverse the Examiner's contention that Fielder renders claims 1-9 and 17-23 obvious and submit that the Examiner has failed to establish a prima facie cases of obviousness. *See* MPEP § 2143.01 (The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination."); MPEP § 2112 ("The mere fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.") (emphasis in original).

Turning to the language of the claims, claim 1 as amended recites: "iii) for each transform coefficient in the sequence, multiplying the real and imaginary components of the transform coefficient by respective second trigonometric function factors, adding the multiplied real and imaginary transform coefficient components to generate an addition stream coefficient, and subtracting the multiplied real and imaginary transform coefficient components to generate a subtraction stream coefficient; iv) multiplying the addition and subtraction stream coefficients with respective third trigonometric function factors; and v) subtracting the corresponding multiplied addition and subtraction stream coefficients to generate audio coded frequency domain coefficients." The Examiner points in a conclusory fashion to a "post multiply step" in Fielder as rendering obvious all three of the recited steps. The Examiner fails to indicate how Fielder discloses or teaches: generating "an addition stream coefficient"; generating "a subtraction stream coefficient"; "multiplying the addition and subtraction stream coefficients with respective third trigonometric function factors"; or "subtracting the corresponding multiplied addition and subtraction stream coefficients to generate audio coded frequency domain coefficients" as claims.

Claim 17 recites: "post-processing the sequence of transform coefficients including applying first post-multiplication factors to the real and imaginary coefficient components, differencing and combining the post-multiplied real and imaginary components, applying second post-multiplication factors to the difference and combination results, and differencing to obtain a sequence of modified discrete cosine transform coefficients representing

said input sequence of digital audio samples." The Examiner relies on the reasoning applied to claim 1. The Examiner makes no attempt to identify what portion of Fielder teaches or suggests "applying first post-multiplication factors to the real and imaginary coefficient components, differencing and combining the post-multiplied real and imaginary components, applying second post-multiplication factors to the difference and combination results, and differencing" as recited.

Claims 2-9 depend from claim 1 and claims 18-23 depend from claim 17. Accordingly, Applicants submit that claims 1-9 and 17-23 are not rendered obvious by Fielder.

The Examiner rejected claims 10-13, 16 and 24-27 under 35 U.S.C. § 103(a) as obvious over Fielder in view of Proakis, et al, Digital Signal Processing, principles, algorithms and applications (3d ed. 1996) ("Proakis"). Applicants respectfully traverse the Examiner's contention that Fielder in view of Proakis renders claims 10-13, 16 and 24-27 obvious.

Applicants respectfully submit that Fielder is not an appropriate primary reference and further that modifying Fielder as suggested by the Examiner would improperly change the function of Fielder.

Claim 10 as amended recites: "combining first and second sequences of digital audio samples from first and second audio channels into a single complex sample sequence; processing the complex sample sequence by multiplying the input sequence samples by a first trigonometric function; determining a Fourier transform coefficient sequence; generating first and second transform coefficient sequences by combining and/or differencing first and second selected transform coefficients from said Fourier transform coefficient sequence; and for each of the first and second transform coefficient sequences, generating audio coded frequency domain coefficients to generate respective sequences of said audio coded frequency domain coefficients for the first and second audio channels." Similarly, claim 24 recites "for each corresponding frequency domain coefficient in the first and second sequences, selecting first and second complex transform coefficients from said sequence of complex transform coefficients, combining the first complex transform coefficient and the complex conjugate of the second complex transform coefficient for said first channel and differencing the first complex transform coefficient and the complex conjugate of the second complex transform coefficient for said

second channel, and applying respective post-multiplication factors to the combination and difference to obtain said audio coded frequency domain coefficients." The Examiner admits the "intermediate steps" are not disclosed by Fielder. The Examiner does not argue the intermediate steps missing from Fielder are taught by Proakis, and points to no specific language in Proakis disclosing or suggesting the recited limitations.

Further, both Fielder and Proakis teach away from the claimed invention. The Examiner has misquoted Fielder, which states "In two-channel systems, signal sample blocks from each of the two channels are transformed by ***two*** FFT processes into a DCT_1/DCT_2 block pair." See Column 36, lines 38-41 (emphasis added). Thus, Fielder does not teach or suggest using ***a*** Fourier transform coefficient sequence to generate first and second transform coefficient sequences as the Examiner suggests. Fielder instead teaches away from the claimed invention by teaching that in a two-channel system, two FFT processes should be used. Proakis assumes as a condition that the input sequences to the transform are real-valued sequences. See page 475-76. Thus, Proakis assumes there is no need for the claimed intermediate steps. Claims 11-13 and 16 depend from claim 10 and claims 25-27 depend from claim 24. Accordingly, Applicants respectfully submit that claims 10-13, 16, and 25-27 are not render obvious by Fielder in view of Proakis.

The Examiner rejected claims 14-15 and 28-39 under 35 U.S.C. § 103(a) as obvious over Fielder in view of Proakis and U.S. Patent No. 6,304,847 issued to Jhung. Claims 14 and 15 depend from claim 10, which, as discussed above, is not rendered obvious by the combination of Fielder and Proakis. The Examiner does not contend that Jhung teaches or suggests the claimed intermediate steps missing from Fielder and Proakis.

Independent claim 28 recites "a transform processor to apply a fast Fourier transform to the modified input sequence samples to thereby generate a transform coefficient sequence having real and imaginary coefficient components; and a post-transform processor to process the sequence of transform coefficients by applying first post-multiplication factors to the real and imaginary coefficient components, differencing and combining the post-multiplied real and imaginary components, applying second post-multiplication factors to the difference and combination results, and differencing to obtain a sequence of audio coded frequency domain

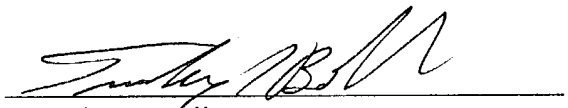
coefficients representing the input sequence of digital audio samples." Claims 29-39 depend from claim 28. The Examiner merely points to the arguments made with respect to claims 1, 10 and 14. As noted above, the claimed intermediate steps are not taught or suggested by Fielder or Proakis and the Examiner does not contend they are taught or suggested by Jhung. Accordingly, Applicants respectfully submit that claims 14-15 and 28-39 are not rendered obvious by Fielder in view of Proakis and Jhung.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC



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